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EXAMINER

LE, MIRANDA

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,284	Applicant(s) JUNG ET AL.	
	Examiner MIRANDA LE	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment, filed 12/21/07.

Claims 1, 3-25 are pending in this application. This action is made Final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Murase et al. (US Patent No. 6,377,747).

Murase anticipated independent claim 18 by the following:

As per claim 18, Murase teaches a method of reproducing audio-visual data (*i.e. reproducing an AV stream, col. 8, lines 1-15*) in an interactive mode (*i.e. a flexible correlation between audio stream and video streams, col. 6, lines 46-51, e.g. (a)dual monaural audio data having first audio channel data and second audio channel data, one of which is to be selectively reproduced; (b)stereo audio data having first audio channel data and second audio channel data, which are to be simultaneously reproduced and (c)monaural audio data having data for*

*only one audio channel, See Figs. 42a, b, c, col. 5, line 47 to col. 6, line 4) associated with the audio-visual data the interactive data (the selection of the desired channel based on a user's preferred language) comprising a plurality of interactive data respectively corresponding to a plurality of different natural languages (i.e. audio streams 2 contains a mix of different audio types, e.g. stereo content might be the commercials in a television broadcast while the dual monaural content contains separate audio streams of a **bilingual broadcast** in Japanese and English, col. 6, lines 10-13), the method comprising:*

reading (i.e. This playback device has reading means (7807, 7808) for reading management information from a data area of the optical disc, col. 8, lines 1-15) language information (i.e. management information, col. 8, lines 1-15) specifying the plurality of different natural language (i.e. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15; audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43) of the plurality of interactive data (i.e. first audio channel data or second audio channel data, col. 8, lines 1-15; audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43);

reading one of the plurality of interactive data corresponding to a selected one (i.e. one is selectively reproduced, col. 8, lines 1-15) of the plurality of different natural languages (i.e. For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b by the user, col. 14, lines 31-43) specified by

the read language information (*i.e. first audio channel data or second audio channel data, col. 8, lines 1-15; audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43*);

interpreting (*i.e. decoding, col. 8, line 1-15*) and executing (*i.e. reproduced, col. 8, lines 1-15*) the read one of the plurality of interactive data (*i.e. a decoder (7806) for selecting and decoding audio channel data indicated by the preference information. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15*).

As per claim 19, Murase teaches the method of claim 18, further comprising reproducing a portion of the audio-visual data associated with the interpreted and executed one of the plurality of interactive data (*i.e. When the time indicated by the STC 51 and the SCR written to the pack header match, the pack is input to the demultiplexer 52. The demultiplexer 52 then interprets the stream ID in the packet header, and passes the audio stream and video stream contained in the payload data to the appropriate decoder buffers. The PTS and DTS are also read from the packet header, col. 4, lines 13-19*).

As per claim 20, Murase teaches the method of claim 18, wherein the reading of one of the plurality of interactive data comprises:

selecting one of the plurality of different natural languages specified by the read language information that is the same as a natural language specified by language information stored in a reproducing apparatus that is performing the method (*i.e. AV stream 2 in FIG. 42(b) similarly*

comprises one audio stream for the same video stream, but the audio stream in this case comprises two channels, i.e., main and sub audio channels. In this case the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59);

reading one of the plurality of interactive data corresponding to the natural language specified by the stored language information (*i.e. AV stream 2 in FIG. 42(b)*) similarly comprises one audio stream for the same video stream, but the audio stream in this case comprises two channels, i.e., main and sub audio channels. In this case the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59).

As per claim 21, Murase teaches the method of claim 20 wherein the natural language specified by the stored language information is a natural language that was specified by a user of the reproducing apparatus (*i.e. a user selects the AV streams to be played from among the plurality AV stream on the disc, col. 25, lines 22-23; in FIG. 42(b)* similarly comprises one audio stream for the same video stream, but the audio stream in this case comprises two channels, i.e., main and sub audio channels; the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59).

As per claim 22, Murase teaches the method of claim 20, wherein the stored language information is language information specifying a natural language of a menu of the reproducing apparatus, or a natural language of an audio stream to be reproduced by the reproducing apparatus, or a natural language of a caption to be reproduced by the reproducing apparatus, or a natural language of the interactive data to be read in the reading of one of the plurality of interactive data (*i.e. AV stream 2 in FIG. 42(b) similarly comprises one audio stream for the same video stream, but the audio stream in this case comprises two channels, i.e., main and sub audio channels. In this case the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59*).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time

a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 5, 6, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al. (US Patent No. 6,377,747), in view of Hirayama et al. (US Patent No. 5,652,824).

As per claim 1, Murase teaches a reproducing method reproducing AV data (*i.e. reproducing an AV stream, col. 8, lines 1-15*) in a interactive mode (*i.e. . (a) dual monaural audio data having first audio channel data and second audio channel data, one of which is to be selectively reproduced; (b) stereo audio data having first audio channel data and second audio channel data, which are to be simultaneously reproduced and (c) monaural audio data having data for only one audio channel, See Figs. 42a, b, c, col. 5, line 47 to col. 6, line 4*) using a reproducing apparatus (*i.e. the playback device, col. 8, lines 1-15*), the method comprising:

reading (*i.e. This playback device has reading means (7807, 7808) for reading management information from a data area of the optical disc, col. 8, lines 1-15*) language information (*i.e. management information, col. 8, lines 1-15*) indicating a language (*i.e. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15; audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43*) used with contents contained in interactive data (*i.e. first audio channel data or second audio channel data, col. 8, lines 1-15; audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43*);

selecting and reading the interactive data (*i.e. one is selectively reproduced, col. 8, lines 1-15*) made with the same language as player language information (*i.e. For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b by the user, col. 14, lines 31-43*) set in the reproducing apparatus with reference to the read language information (*i.e. a decoder (7806) for selecting and decoding audio channel data indicated by the preference information. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15*).

interpreting (*i.e. decoding, col. 8, line 1-15*) and executing (*i.e. reproduced, col. 8, lines 1-15*) the read one of the plurality of interactive data (*i.e. a decoder (7806) for selecting and decoding audio channel data indicated by the preference information. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15, see Fig. 50*).

Murase does not teach wherein the reading the language information comprises: opening a startup file first read when the interactive mode is selected; and reading the language information from the startup file.

Hirayama teaches the reading the language information comprises: opening a startup file first read (*i.e. read management information, See Fig. 7*) when the interactive mode is selected (*i.e. disk installed, See Fig. 4*); and reading the language information from the startup file (*i.e. Control information indicating the data arrangement of the data area and types of languages is*

recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).

It would have been obvious to one of ordinary skill of the art having the teaching of Murase and Hirayama at the time the invention was made to modify the system of Murase to include the limitations as taught by Hirayama. One of ordinary skill in the art would be motivated to make this combination in order to decode the video information and reproducing any language information piece selected in view of Hirayama (col. 2, lines 22-24), as doing so would give the added benefit of providing a multilingual recording medium which facilitates the handling of an information source during reproduction and which serves as an information source containing information in at least three languages as taught by Hirayama (col. 1, lines 44-50).

As per claim 5, Hirayama teaches the reproducing method of claim 1, wherein the selecting and reading the interactive data comprises finding player language information set in the reproducing apparatus from a system parameter table stored as a system parameter in the reproducing apparatus (*i.e.* For example, when the user selects #0, description code 1 appears as shown in FIG. 4B. At this time, D1 (*i.e.*, English) is selected for speech. When the user selects #2, D2 (Japanese) is selected for speech, col. 9, lines 1-4).

As per claim 6, Hirayama teaches the reproducing method of claim 1, wherein the selecting and reading interactive data comprises finding a system parameter SPRM 0 as player language information that is set according to a DVD-Video standard in the reproducing apparatus (*i.e. For example, when the user selects #0, description code 1 appears as shown in FIG. 4B. At this time, D1 (i.e., English) is selected for speech. When the user selects #2, D2 (Japanese) is selected for speech, col. 9, lines 1-4).*

As per claim 23, Murase teaches the reproducing method of claim 18, wherein the interactive data further comprises:

a plurality of loading files (*see Figs. 2, 3; col. 10, lines 23-41*) respectively corresponding to the plurality of different natural languages of the plurality of interactive data, each of the loading files specifying an interactive data file corresponding to a respective one of the plurality of different natural languages (*i.e. AV files are recorded as an RTR_MOV.VRO file recording moving picture content (referred to as video below), or an RTR_STO.VRO file recording still image data and simultaneously recorded audio data, col. 10, lines 19-22*); *AV stream 2 in FIG. 42(b) similarly comprises one audio stream for the same video stream, the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59*; user preference information recorded to PR_FLG memory is recorded to ATR0 in stream information M_VOB_STI, that is, to areas b19, b18 in the A_ATR0 format shown on the bottom in FIG. 13. Other information is also recorded to complete M_VOB_STI, and recorded to the RTR.IFO file, *col. 28, lines 10-15.*

Note that in order for the reproduction operates to enable a user to select a channel based on a preferred language, PR_FLG files should be loaded in memory and recorded to a management information file e.g. RTR.IFO file, col. 10, lines 15-18); and

a file listing the plurality of loading files (see Figs. 2, 3; col. 10, lines 23-41) in association with the language information identifying the plurality of different natural languages of the plurality of interactive data (i.e. AV stream 2 in FIG. 42(b) similarly comprises one audio stream for the same video stream, the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59);

wherein the reading of the language information (i.e. This playback device has reading means (7807, 7808) for reading management information from a data area of the optical disc, col. 8, lines 1-15) comprises reading the file and identifying the interactive data file corresponding to each of the plurality of different natural languages of the plurality of interactive data (i.e. AV stream 2 in FIG. 42(b) comprises one audio stream for the same video stream, the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59);

wherein the reading of one of the plurality of interactive data (i.e. This playback device has reading means (7807, 7808) for reading management information from a data area of the optical disc, col. 8, lines 1-15) comprises reading the interactive data file identified in the reading of the language information as corresponding to the selected of the plurality of different natural

languages (*i.e.* AV stream 2 in FIG. 42(b) comprises one audio stream for the same video stream, the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59);

Murase does not teach a startup file.

Hirayama teaches this limitation (*i.e.* read management information, See Fig. 7; Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).

It would have been obvious to one of ordinary skill of the art having the teaching of Murase and Hirayama at the time the invention was made to modify the system of Murase to include the limitations as taught by Hirayama. One of ordinary skill in the art would be motivated to make this combination in order to decode the video information and reproducing any language information piece selected in view of Hirayama (col. 2, lines 22-24), as doing so would give the added benefit of providing a multilingual recording medium which facilitates the handling of an information source during reproduction and which serves as an information source containing information in at least three languages as taught by Hirayama (col. 1, lines 44-50).

6. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumagari et al. (US Pub. No. 20030161615), in view of Hirayama et al. (US Patent No. 5,652,824).

As per claim 14, Tsumagari teaches a method of reproducing enhanced audio visual data (*i.e. DVD-Video playback controller 220 can control playback of DVD-Video contents 10 in accordance with a "DVD control signal" output from ENAV engine, [0091]*) from an optical disk (*i.e. a digital video (or audio) disc, [0019]*), comprising:

detecting enhanced audio visual (ENAV) data (*i.e. ENAV contents, [0112]*) on the optical disk when an interactive mode (*i.e. interactive mode M3, See Fig. 25*) is selected (*i.e. Video player 100, and converts the contents of the interpreted DVD status signal into a corresponding property signal specified in ENAV contents 30 (30W) (e.g., converts a DVD status signal which indicates that the current audio language is Japanese into a property signal that designates Japanese as a language used by ENAV), [0112]*) ([0381, 0382, 0383]);

selecting ENAV data (*i.e. The player unit is configured to play back recorded contents, that contents may include AV contents and navigation contents which can be played back in association with the playback contents (menus, chapters) of the video contents, from a digital video (or audio) disc, [0019]*) based on the read language information (*i.e. an audio language, sub-picture caption language, [0091]*);

executing the selected ENAV data (*i.e. ENAV engine 300 outputs ENAV contents playback data, [0180]*) ([0381, 0382, 0383]); and

reproducing (*i.e. DVD-Video playback controller 220 can control playback of DVD-Video contents 10 in accordance with a "DVD control signal" output from ENAV engine, [0091]*) corresponding audio visual data from the optical disk together with the selected ENAV

data (i.e. playing back recorded contents that include DVD-Video contents 10 and ENAV contents 30 from a DVD video disc, [0186]) ([0381, 0382, 0383]).

Tsumagari does not teach reading language information from a startup file on the optical disk.

Hirayama teaches reading language information (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*) form a startup file on the optical disk (*i.e. read management information, See Fig. 7*).

It would have been obvious to one of ordinary skill of the art having the teaching of Tsumagari and Hirayama at the time the invention was made to modify the system of Tsumagari to include the limitations as taught by Hirayama. One of ordinary skill in the art would be motivated to make this combination in order to decode the video information and reproducing any language information piece selected in view of Hirayama (col. 2, lines 22-24), as doing so would give the added benefit of providing a multilingual recording medium which facilitates the handling of an information source during reproduction and which serves as an information source containing information in at least three languages as taught by Hirayama (col. 1, lines 44-50).

As per claim 15, Hirayama teaches the method of claim 14, further comprising:
comparing the read language information with a player language information stored in a system parameter table (*i.e. For example, when the user selects #0, description code 1 appears as shown in FIG. 4B. At this time, D1 (i.e., English) is selected for speech. When the user selects #2, D2 (Japanese) is selected for speech, col. 9, lines 1-4).*

As per claim 16, Hirayama teaches the method of claim 14, wherein the reproducing comprises reproducing corresponding audio visual data from the optical disk together with the selected AV data in the interactive mode (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).*

Tsumagari teaches ENAV data (*i.e. ENAV contents 30 can be classified into ENAV playback information and the data body of ENAV contents, [0065]*)

As per claim 17, Tsumagari teaches the method of claim 14, wherein the reproducing comprises reproducing corresponding audio visual data from the optical disk together with the selected ENAV data in a non interactive mode (*i.e. CSS parser verifies and parses CSS style sheet grammar and builds @rules and style rule sets list. CSS parser receives inline style information from XHTML parser or external CSS style sheet indicated by XHTML parser's style*

sheet link information, [0400]).

7. Claims 3, 4, 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al. (US Patent No. 6,377,747)), in view of Hirayama et al. (US Patent No. 5,652,824), and further in view of Tsumagari et al. (US Pub. No. 20030161615).

As per claim 3, Hirayama teaches the reproducing method of claim 1, wherein the reading the language information from the startup file comprises reading language information recorded, from a startup file (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).*

Murase and Hirayama do not teach:

an element linking a loading information file;

a corresponding enhanced audio visual (ENAV) application.

Tsumagari teaches:

an element linking a loading information file (*i.e. XHTML parser's style sheet link information, [0400])*;

a corresponding enhanced audio visual (ENAV) application (*i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065])*.

It would have been obvious to one of ordinary skill of the art having the teaching of Murase, Hirayama, and Tsumagari at the time the invention was made to modify the system of Murase to include the limitations as taught by Tsumagari. One of ordinary skill in the art would be motivated to make this combination in order to allow users to play back the contents (movie or music) of each VTS by a method different from VMG/VTSI prepared by the provider in view of Tsumagari ([0064]), as doing so would give the added benefit of providing an enhanced navigation system that uses a digital information medium complying with the DVD-Video standard as taught by Tsumagari ([0003]).

As per claim 4, Hirayama teaches the reproducing method of claim 1, wherein the reading the language information comprises reading language information indicating respectively the language used in a plurality of applications, each of which includes substantially similar contents and is made with a different language from the other applications, in order to reproduce AV data in the interactive mode, from the startup file (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*).

Murase and Hirayama do not teach ENAV applications.

Tsumagari teaches ENAV applications (*i.e. ENAV contents 30 can be classified into ENAV playback information and the data body of ENAV contents, [0065]*).

It would have been obvious to one of ordinary skill of the art having the teaching of Murase, Hirayama, and Tsumagari at the time the invention was made to modify the system of Murase to include the limitations as taught by Tsumagari. One of ordinary skill in the art would be motivated to make this combination in order to allow the user to play back the contents (movie or music) of each VTS by a method different from VMG/VTSI prepared by the provider in view of Tsumagari ([0064]), as doing so would give the added benefit of providing an enhanced navigation system that uses a digital information medium complying with the DVD-Video standard as taught by Tsumagari ([0003]).

As per claim 7, Hirayama teaches the reproducing method of claim 3, wherein the selecting and reading the interactive data comprises reading files belonging to the corresponding application with reference to a loading information file informing location information of the files belonging to the corresponding application (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*).

Tsumagari teaches ENAV applications (*i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065]*).

As per claim 8, Hirayama teaches the reproducing method of claim 3, wherein the

reading the language information further comprises comparing the language information with the player language information and selecting one among a plurality of applications (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*).

Tsumagari teaches ENAV applications (*i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065]*).

As per claim 9, Hirayama teaches the reproducing method of claim 3, wherein the reading the language information further comprises parsing the language information recorded (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*).

Tsumagari teaches using the element linking the loading information file included in the corresponding ENAV applications (*i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065]*).

As per claim 10, Hirayama teaches the reproducing method of claim 9, wherein the

reading the language information further comprises parsing the language information recorded *(i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).*

Tsumagari teaches an element that stores a condition selecting a linked loading information file, included in the element linking the loading information file *(i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065]).*

As per claim 11, Hirayama teaches the reproducing method of claim 8, wherein the reading the language information comprising parsing the language information recorded *(i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).*

Tsumagari teaches using a "name" property and a "value" property in an element that stores a condition selecting a linked loading information file, included in the element linking the loading information file *(i.e. CSS parser verifies and parses CSS style sheet grammar and builds @rules and style rule sets list. CSS parser receives inline style information from XHTML parser or external CSS style sheet indicated by XHTML parser's style sheet link information, [0400]).*

As per claim 12, Hirayama teaches the reproducing method of claim 8, wherein the reading the language information further comprises parsing the language information recorded *(i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21).*

Tsumagari teaches using a "name" property and a "value" property in the element linking the loading information file *(i.e. CSS parser verifies and parses CSS style sheet grammar and builds @rules and style rule sets list. CSS parser receives inline style information from XHTML parser or external CSS style sheet indicated by XHTML parser's style sheet link information, [0400]).*

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al. (US Patent No. 6,377,747)), in view of Hirayama et al. (US Patent No. 5,652,824), and further in view of Tsumagari et al. (US Pub. No. 20030161615), and further in view of Kou (US Patent No. 6,661,466).

As per claim 13, Murase, Hirayama, Tsumagari do not teach the reproducing method of claim 3, wherein the reading the language information comprises parsing the language information recorded in a language code with two characters according to an ISO 639 standard.

However, Kou teaches the reading the language information comprises parsing the language information recorded in a language code with two characters according to an ISO 639 standard (*i.e. using the ISO.sub.-- 639_language_code definitions, col. 7, line 58 to col. 8, line 11*).

It would have been obvious to one of ordinary skill of the art having the teaching of Murase, Hirayama, Tsumagari and Kou at the time the invention was made to modify the system of Murase, Hirayama, Tsumagari to include the reading the language information comprises parsing the language information recorded in a language code with two characters according to an ISO 639 standard as taught by Kou. One of ordinary skill in the art would be motivated to make this combination in order to determine if an audio component compatible with the natural language in view of Kou, as doing so would give the added benefit of automatically setting a natural language default selection in a video presentation device and facilitating easy manufacturing adjustments to accommodate a variety of possible natural language preferences that exist among different geographical areas as taught by Kou (Summary).

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al. (US Patent No. 6,377,747)), in view of Hirayama et al. (US Patent No. 5,652,824), and further in view of Chung et al. (US Patent No. 6,507,696).

As per claim 24, Murase, Hirayama teach the reproducing method of claim 1, but do not specifically teach wherein the interactive mode is a mode in which an AV pictures reproduced from the AV data is embedded in an interactive picture; and

wherein the interpreting and executing comprises interpreting and executing the read interactive data to display the interactive picture in which the AV picture is embedded.

Chung teaches:

the interactive mode (*i.e. DVD data stream or application data stream selection based on a user interaction requests, Abstract*) is a mode in which an AV pictures (*i.e. DVD subpicture data, col. 2, lines 5-20*) reproduced from the AV data (*i.e. the DVD data stream includes DVD video data, DVD audio data, and DVD subpicture data, col. 2, lines 5-20*) is embedded (*i.e. merged, col. 2, lines 20-30*) in an interactive picture (*i.e. This may be accomplished by detecting selection of a user interaction request that is requesting the display of a DVD subpicture or an application subpicture, col. 2, lines 5-20*); and

wherein the interpreting and executing comprises interpreting and executing the read interactive data to display the interactive picture in which the AV picture is embedded (*i.e. When the user interaction request relates to the application data stream, the application data stream is displayed only or merged with the DVD data stream. With such a method and apparatus, a user, via a single control device, may evoke DVD data stream information (i.e., DVD video data, DVD audio data and DVD subpicture data) and/or application data stream (i.e., application video data, application audio data, and application subpicture data), which is done seamlessly with respect to the user, col. 2, lines 20-30*).

It would have been obvious to one of ordinary skill of the art having the teaching of Murase, Hirayama and Chung at the time the invention was made to modify the system of Murase, Hirayama to include the reading the language information comprises parsing the language information recorded in a language code with two characters according to an ISO 639

standard as taught by Chung. One of ordinary skill in the art would be motivated to make this combination in order to display a DVD subpicture in view of Chung (col. 2, lines 5-20), as doing so would give the added benefit of providing a method and apparatus that integrates the hardware applications of the DVD player and displaying device and DVD video user interactive content of the DVD disk into a single user controlled mechanism as taught by Chung (col. 1, lines 49-52).

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al. (US Patent No. 6,377,747)), and further in view of Chung et al. (US Patent No. 6,507,696).

As per claim 25, Murase does not teach the reproducing method of claim 18, wherein the interactive mode is a mode in which an AV pictures reproduced from the audio-visual data is embedded in an interactive picture; and

wherein the interpreting and executing comprises interpreting and executing the read one of the plurality of interactive data to display the interactive picture in which the AV picture is embedded.

Chung teaches:

the interactive mode (*i.e. e DVD data stream or application data stream selection based on a user interaction requests, Abstract*) is a mode in which an AV pictures (*i.e. DVD subpicture data, col. 2, lines 5-20*) reproduced from the audio-visual data (*i.e. the DVD data stream includes DVD video data, DVD audio data, and DVD subpicture data, col. 2, lines 5-20*) is embedded (*i.e. merged, col. 2, lines 20-30*) in an interactive picture (*i.e. This may be accomplished by*

detecting selection of a user interaction request that is requesting the display of a DVD subpicture or an application subpicture, col. 2, lines 5-20); and

wherein the interpreting and executing comprises interpreting and executing the read one of the plurality of interactive data to display the interactive picture in which the AV picture is embedded (*i.e. When the user interaction request relates to the application data stream, the application data stream is displayed only or merged with the DVD data stream. With such a method and apparatus, a user, via a single control device, may evoke DVD data stream information (i.e., DVD video data, DVD audio data and DVD subpicture data) and/or application data stream (i.e., application video data, application audio data, and application subpicture data), which is done seamlessly with respect to the user, col. 2, lines 20-30*).

It would have been obvious to one of ordinary skill of the art having the teaching of Murase and Chung at the time the invention was made to modify the system of Murase to include the reading the language information comprises parsing the language information recorded in a language code with two characters according to an ISO 639 standard as taught by Chung. One of ordinary skill in the art would be motivated to make this combination in order to display a DVD subpicture in view of Chung (col. 2, lines 5-20), as doing so would give the added benefit of providing a method and apparatus that integrates the hardware applications of the DVD player and displaying device and DVD video user interactive content of the DVD disk into a single user controlled mechanism as taught by Chung (col. 1, lines 49-52).

Response to Arguments

11. Applicant's arguments filed 03/10/2003 have been fully considered but they are not persuasive.

Claim Rejections under 35 USC 102

In response to applicant's arguments with respect to Murase does not teach "a method of reproducing audio-visual data in an interactive mode supported by interactive data associated with the audio-visual data", the examiner respectfully disagrees for the following reasons:

The present invention provides an information storage medium, having a data structure capable of selecting additional contents made with a language selected by a user or with a predetermined language and reproducing AV data in an interactive mode when an information storage medium storing the AV data is reproduced, and a reproducing apparatus and reproducing method thereof, [0006].

Analogously, Murase et al. provides a reproducing AV data containing a video stream, and at least one audio stream pertains *(a)dual monaural audio data having first audio channel data and second audio channel data, one of which is to be selectively reproduced; (b)stereo audio data having first audio channel data and second audio channel data, which are to be simultaneously reproduced and (c)monaural audio data having data for only one audio channel, See Figs. 42a, b, c, col. 5, line 47 to col. 6, line 4) .*

As shown in FIG. 42(b), AV stream 2 comprises one audio stream for the same video stream, the audio stream comprises two channels, i.e., main and sub audio channels. This audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language, e.g. English), and a second audio channel containing the

auxiliary audio data of the sub channel (such as a second language, e.g. Japanese), as such, a user can select the desired AV stream to be played from among the plural AV streams on the disc.

a. Murase does disclose interactive data, interactive mode.

In response to applicant's argument with respect to *"the audio channel preferred by the user is automatically reproduced in a normal, non-interactive mode if the user has set a preference, or audio channel 1 is automatically reproduced by default in a normal, non-interactive mode if the user has not set a preference, without any input from the user as shown in FIG. 49 of Murase and described, for example, in column 7, lines 10-18, column 29, lines 34-48, and column 30, lines 36-43, of Murase. Thus, there is no interactivity of any kind during the reproduction of Murase's audio-video data, such that Murase does not disclose an interactive mode or any interactive data as recited in claim 18"*, the examiner notes that although Murase suggests that "the user can preprogram the disc player once with the user's preferred audio channel selection so that the desired audio channel will always be automatically selected and played without the user needing to change the audio channel at all, col. 29, line 66 to col. 30, line 3), Murase also clearly discloses the following paragraphs:

"a user can select which of the two audio stream or channels to play, and the audio stream or channel selected by the user is reproduced **simultaneously with the video", col. 5, lines 38-41;**

"after inserting a DVD-RAM disc to the disc player for reproduction, the user selects the desired AV stream to be played from among the plural AV stream on the disc", col. 25, lines 21-25.

Therefore, contrary to applicant's assertion, there is indeed interactivity during reproduction in which the method of Murase enables a DVD recorder to record a flexible correlation between video streams and audio streams so that different audio stream configurations can be achieved for each AV stream on the disc (col. 6, lines 47-50), and to display the preferred audio channel based on user's language selection (col. 5, lines 52-59).

Murase also teaches the AV pictures as moving picture belonging to AV files at col. 10, lines 10-22 (*i.e. AV files are recorded as an RTR_MOV.VRO file recording moving picture content (referred to as video below), or an RTR_STO.VRO file recording still image data and simultaneously recorded audio data, col. 10, lines 19-22*).

It is thus obvious that interactive data and interactive mode are clearly shown in audio stream 2 of Murase which contains two channels. The beginning of this audio stream 2 is recorded in stereo and then switches to dual monaural audio content (col. 5, lines 61-65). Exemplary stereo content might be the commercials in a television broadcast while the dual monaural content **contains separate audio streams of a bilingual broadcast in, for example, Japanese and English** (col. 6, lines 9-13).

b. Murase does disclose reading language information specifying the plurality of different natural language of the plurality interactive data.

Language information equates to *management information* of Murase, col. 8, lines 1-15.

The step of reading language information equates to the step of reading management information of Murase (*i.e. This playback device has reading means (7807, 7808) for reading management information from a data area of the optical disc, col. 8, lines 1-15*).

Interactive data equates to audio channels selection based on user's language preferences of Murase (*i.e. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15*).

The plurality of different natural language is taught by Murase as first audio channel is Japanese, second audio channel is English (*i.e. audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43*).

It should be noted selection step of Murase based on the user's preferred language, col. 14, line 14, lines 31-43, and col. 5, lines 52-59 (*i.e. For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b **by the user**, col. 14, lines 31-43; and AV stream 2 in FIG. 42(b) comprises one audio stream for the same video stream, the audio comprises two channels, i.e., main and sub audio channels. The audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59*).

The management information of Murase indicates the plurality natural language as a plurality of channel as *the management information indication that two or more different audio stream areas are contained in one audio stream (i.e. the audio stream contains at least two of the following areas: a first area containing first audio channel data and second audio channel data, one of which is selectively reproduced; a second area containing simultaneously reproduced first*

audio channel data and second audio channel data; and a third area containing data for one audio channel. In this case, the management information additionally contains application information indicating that two or more different audio stream areas are contained in one audio stream, col. 7, lines 33-42).

It should be noted that each area of Murase contains one or plurality of audio channels, and each audio channel corresponds to a particular language (*i.e. AV stream 2 in FIG. 42(b) comprises one audio stream for the same video stream, the audio stream in this case comprises two channels, i.e., main and sub audio channels. In this case the audio stream contains two selectively reproducible audio channels, a first audio channel containing the main audio (such as a first language), and a second audio channel containing the auxiliary audio data of the sub channel (such as a second language), col. 5, lines 52-59).*

c. Murase teaches non-interactive mode without input from the user.

Murase teaches “interactive mode” as the selection either first channel, second channel or both, wherein each channel referring to a particular language as Japanese or English. This selection is based on user’s language preference (*i.e. For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b by the user, col. 14, lines 31-43).*

Murase teaches “input from user” as the preference flag is set by a user (*i.e. For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b by the user, col. 14, lines 31-43), also see Fig. 48, reference #29 --“User selects program to be played”.*

d. Murase teaches interpreting and executing the read one of the plurality of interactive data

Murase teaches these steps as:

interpreting (*i.e. decoding, col. 8, line 1-15*) and executing (*i.e. reproduced, col. 8, lines 1-15*) the read one of the plurality of interactive data (*i.e. a decoder (7806) for selecting and decoding audio channel data indicated by the preference information. The preference information indicates whether the first audio channel data or second audio channel data is to be preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15*).

e. Murase teaches selecting and reading the interactive data made with the same language as player language information set in the reproducing apparatus with reference to the read language information.

Murase teaches these limitations as:

selecting and reading the interactive data (*i.e. one is selectively reproduced, col. 8, lines 1-15*) made with the same language as player language information (*i.e. For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b by the user, col. 14, lines 31-43*) set in the reproducing apparatus with reference to the read language information (*i.e. a decoder (7806) for selecting and decoding audio channel data indicated by the preference information. The preference information indicates whether the first audio channel data or second audio channel data is to be*

preferentially reproduced when reproducing the area containing the first audio channel data or second audio channel data of which one is selectively reproduced, col. 8, lines 1-15).

f. Murase teaches the selection of interactive mode.

The examiner interprets “interactive mode” of Murase as the selection either first channel, second channel or both, wherein each channel referring to a particular language as Japanese or English. This selection is based on user’s preferred language (*i.e. the audio channel indicated by the user preference information is selected, col. 30, lines 38-43; For example, if audio channel 1 is in Japanese, audio channel 2 is in English, and the user prefers to listen in English, this preference flag is set to 10b by the user, col. 14, lines 31-43).*

Claim Rejections under 35 USC 103

Rejection 1

Claim 1

As discussed in the previous paragraphs, in response to applicant’s argument with respect to “the audio channel preferred by the user is automatically reproduced in a normal, non-interactive mode if the user has set a preference”, under the same rationale as provided in claim 18, the same reasoning would be applicable to Murase’s teaching interactive data

Hirayama’s selecting is performed after the management information is first read, not “when the interactive mode is selected” as recited in claim 1.

Murase teaches **opening a file**.

Murase does not teach opening **a startup** file.

Murase teaches the first step of reading the management information from the AV data (*i.e. information about the number of audio channels and whether there is a mixed configuration of multiple audio channels, Step 43, col. 30, lines 29-35*), this step equates to the step of interactive mode is selected.

The next step of Murase, Step 44, col. 30, lines 36-43, is reading user preference information, this step equates to the step of opening a file (*i.e. Step #44: If there are two audio streams, one is selected by means of the user interface of the disc player. If there are multiple audio channels in the selected audio stream, or in the audio stream itself if there is only one audio stream from the start, and user preference information is also recorded, the audio channel indicated by the user preference information is selected. If preference information is not recorded, a default audio channel, such as audio channel 1, is selected, col. 30, lines 36-43*).

Therefore, the step of opening a file of Murase is after the step of selection interactive mode.

Hirayama teach interactive mode as the selection of language for audio and subtitle information, See col. 3, line 62 to col. 3, line 12 (*i.e. A reproduction apparatus of the invention has means for controlling data strings of the video information, pieces of audio information, and subtitle information in at least two languages. The data string control means comprises a first menu screen display means as well as audio and subtitle information selecting means. The first menu screen display means relates a language select menu with a key display signal in accordance with the control information indicating the kinds of languages stored in the management information storage means; the first menu screen display means also displays the language select menu on the video monitor in accordance with the user acknowledged display*

signal for each language. The audio and subtitle information selecting means automatically selects the audio information and subtitle information in the language selected by the select information, when the select information on the language corresponding to the key display signal is entered from an operator panel, col. 3, lines 62 to col. 3, lines 12).

The start up file of the claimed limitation equates to control information of Hirayama (*i.e. In a part of a disk according to the present invention, a management area is formed. A data area is formed in another portion of the disk. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-20).*

The interactive mode of the Applicants is described as a selection ENAV application with a language readable by a user.

Hirayama teach the step of subtitle information in the language is selected, this step is obviously for a user could be able to read subtitle information, therefore, the subtitle information in the language selection should equal to “interactive mode”.

Hirayama teaches the interactive mode is selected as a default mode (*i.e. each time a disk is inserted, the user looks at the menu screen and selects a world language, a speech language, and a subtitle language. The apparatus may store the history of the languages the user has selected in a memory section, making it easier for the user to select languages, col. 12, lines 3-8).*

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Hirayama's selecting is perform after the management information is first read in step S3 in Fig. 7, not when the interactive mode is selected) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is noted the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Claim 23

Murase and Hirayama, as combined, teach the plurality of loading files corresponding to the plurality of different natural language.

As aforementioned, Murase teaches two audio channel, each corresponds to a particular language (*i.e. first audio channel data or second audio channel data, col. 8, lines 1-15; audio channel 1 is in Japanese, audio channel 2 is in English, col. 14, lines 31-43*), each audio channel of Murase equates to a file of the claim limitation. Therefore, two audio channels of Murase correspond to two different natural languages, which are Japanese and English.

The step of loading files corresponding to the plurality of different natural language equates to dual audio of Murase (*i.e. plural audio channel configurations are mixed, Note that a value of 01b indicating plural audio channel configurations are mixed means, for example, that*

two or more audio streams of monaural, stereo, or dual audio (such as in both Japanese and English) are recorded to the AV stream on separate time bases, col. 14, lines 43-54). Therefore, user preference information recorded to PR_FLG memory is recorded to ATR0 in stream information M_VOB_STI, that is, to areas b19, b18 in the A_ATR0 format shown on the bottom in FIG. 13. Other information is also recorded to complete M_VOB_STI, and recorded to the RTR.IFO file, *col. 28, lines 10-15*. Note that in order for the reproduction operates to enable a user to select a channel based on a preferred language, PR_FLG files should be loaded in memory and recorded to a management information file e.g. RTR.IFO file, col. 10, lines 15-18.

Conclusion Rejection1

For the reasons set forth in the preceding paragraphs, it is respectfully submitted that the rejection of claims 1, 5, 6, and 23 (i.e., claims 1 and 23 discussed above and claims 5 and 6 depending from claim1 under 35 USC 103(a) as being unpatentable over Murase in view of Hirayama cannot be patentably distinct from the cited arts.

Rejection 2

Claim 14

audio visual (ENAV) data equates to ENAV contents of Tsumagari, [0112];
an interactive mode equates to interactive mode M3 of Tsumagari, See Fig. 25;
selecting ENAV data equates to navigation ENAV contents to play back of Tsumagari, [0112] (i.e. interactive mode M3, See Fig. 25) is selected (i.e. Video player 100, and converts the contents of the interpreted DVD status signal into a corresponding property signal specified in

ENAV contents 30 (30W) (e.g., converts a DVD status signal which indicates that the current audio language is Japanese into a property signal that designates Japanese as a language used by ENAV), [0112]).

executing the selected ENAV data equates to ENAV engine 300 outputs ENAV contents playback data of Tsumagari, [0180].

reproducing equates to playing back recorded contents of Tsumagari, [0186].

Applicant seems to be questioning Hirayama teaches away of obtaining information identifying an audio language for using in generating the DVD status signal indicating properly information such as an audio language as applicant may arguably that Hirayama is nonanalogous art, the examiner notes it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

In this case, the cited references are within the same field of endeavor as the claimed invention. The instant application provides an information storage medium including AV data, a plurality of enhanced AV (ENAV) applications, each of which includes substantially the same contents and is made with a plurality of different languages in order to reproduce the AV data in an interactive mode, and language information, which is used to select one among the plurality of ENAV applications.

Tsumagari provides a player unit plays back recorded contents that include video contents or AV contents and ENAV contents associated with contents (menu, chapter) of the

video contents, from a DVD-Video disc (Abstract). Tsumagari teaches all the limitation of claim 14, except reading language information from a startup file on the optical disk.

Hirayama, in complement, provides a reproduction apparatus is designed to select and decode speech and subtitles (characters) in a given language from a disk on which various types of information are recorded in different languages (Abstract). Simply by reading the Summary of the two references, one can readily note that the Tsugamari and the claimed invention are both concerned with a reproducing apparatus including an AV reproducing engine which decoded AV data, and an ENAV engine, which includes player language information. Tsugamari discloses in par [0091] that DVD-Video playback controller 220 can control playback of DVD-Video contents 10 in accordance with a "DVD control signal" output from ENAV engine 300. More specifically, when a given event (e.g., menu call or title jump) has occurred during DVD-Video playback, DVD-Video playback controller 220 can output a "DVD event signal" indicating the playback condition of DVD-Video contents 10 to ENAV engine 300. In this case (simultaneously with output of the DVD event signal or an appropriate timing before or after that output timing), DVD-Video playback controller 220 can output a "DVD status signal" indicating property information (e.g., an audio language, sub-picture caption language, playback operation, playback position information, time information, the contents of disc 1, and the like set in player 100) of DVD-Video player 100 to ENAV engine 300. Therefore, similarly to Tsugamari reference, Hirayama's teaching of method for selecting and decoding speech and subtitles (characters) in a given language from a disk on which various types of information are recorded in different languages is analogous to applicant's method of selecting additional contents made with a language selected by a user or with a predetermined language. Therefore, the ordinary

skilled artisan would be motivated look to the cited references to yield the claimed invention since they are complement each other.

Applicant against the references individually, it is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Notably, "Reason, suggestion, or **motivation to combine two or more prior art references in single invention may come from references themselves**, from knowledge of those skilled in art that certain references or disclosures in references are known to be of interest in particular field, or from **nature of problem to be solved**;" *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.* U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181.

Claim 15

a player language information stored in a system parameter table equates to *table contain codes in (VID) AND language code* in Fig. 4A of Hirayama.

the read language information equates to the *reading and storing the management data recorded in the management area* of Hirayama, col. 3, lines 6-11

comparing equates to *the step of selecting* of Hirayama, col. 4, lines 21-28 (i.e. the reproduction apparatus can select and decode speech and subtitles (letters or characters) in a given language, col. 4, lines 21-28)

Claim 17

audio visual data equates to *AV contents* of Tsumagari, [0019] (*i.e. The player unit is configured to play back recorded contents, that contents may include AV contents and navigation contents which can be played back in association with the playback contents (menus, chapters) of the video contents, from a digital video (or audio) disc, [0019]*)

The ENAV data equates to *ENAV contents playback data of Tsumagari, [0112]*.

audio visual data equates to *audio and video information* of Hirayama (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*).

non-interactive mode equates to video mode M1 in Fig. 25 of Tsumagari.

Conclusion Rejection 2

For the reasons set forth in the preceding paragraphs, the examiner maintains that the rejections of claim 14, 15, 17 are proper.

Rejection 3

Claim 3

reading equates to reading management information in Fig. 7 of Hirayama;
startup file equates to *a management area* of Hirayama, col. 2, lines 11-20;

language information recorded equates to *types of languages is recorded in the management area of Hirayama, col. 2, lines 11-20 (i.e. In a part of a disk according to the present invention, a management area is formed. A data area is formed in another portion of the disk. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-20);*

an element linking equates to *XHTML parser's style sheet link information of Tsumagari, [0400];*

enhanced audio visual (ENAV) application equates to *ENAV playback information of Tsumagari, [0065] (i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065]).*

Claim 4

respectively the language used in a plurality of applications equates to *three pieces of language information related to the video information of Hirayama, col. 2, lines 11-21 (i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21)*

ENAV application equates to *ENAV playback information* of Tsumagari, [0065] (*i.e. ENAV contents 30 can be classified into ENAV playback information and the data body of ENAV contents, [0065]*).

Claim 7

information file equates to *audio identification data* of Hirayama, col. 2, lines 11-21 (*i.e. Control information indicating the data arrangement of the data area and types of languages is recorded in the management area. A plurality of data units are recorded in the data area. Each data unit contains video information, and pieces of audio information including at least three pieces of language information related to the video information. Each language information piece has an audio identification data, col. 2, lines 11-21*);

information file equates to *subtitle information in at least two languages* of Hirayama, col. 3, lines 62 to col. 3, lines 12 (*i.e. controlling data strings of the video information, pieces of audio information, and subtitle information in at least two languages, col. 3, lines 62 to col. 3, lines 12*);

location information of the files equates to *the address* of Hirayama, col. 3, lines 45-61 (*i.e. the address of comment information in the languages, along with control information indicating the data arrangement of the data area and types of languages, col. 3, lines 45-61*).

ENAV application equates to *ENAV playback information* of Tsumagari, [0065] (*i.e. ENAV contents 30 can be classified into ENAV playback information, and the data body of ENAV contents, [0065]*).

Claim 12

parsing the language information recorded equates to *indicating the kinds of languages of Hirayama (i.e. The first menu screen display means relates a language select menu with a key display signal in accordance with the control information indicating the kinds of languages stored in the management information storage means, col. 3, lines 62 to col. 3, lines 12);*

a "name" property and a "value" property equal to elements belonging to , HTML or XHTML or SMIL file of Tsumagari (i.e. For example, as a language used as the playback control information, markup languages such as HTML (Hyper Text Markup Language)/XHTML (eXtensible Hyper Text Markup Language), SMIL (Synchronized Multimedia Integration Language), and the like, script languages such as ECMA (European Computer Manufacturers Association) Script, JavaScript, and the like, and so forth can be used in combination. The description contents of the ENAV playback information described in these languages are parsed by ENAV interpreter 330 in FIG. 1 to interpret the parsed contents, [0066]).

As detailed in the rejection, and in the preceding paragraphs, the examiner had identified how Tsumagari reads on the features of claims 3, 4, 7-12. Further, claim 1 as explained, cannot be patentably distinct from the cited arts. Accordingly, the claimed invention as represented in the claims does not represent a patentable over the art of record.

Rejection 4

Claims 13

Under the same reasons set forth in claims 1, 3, claim 13 stands rejected.

Patentability of claim 24 and 25

Applicant's arguments with respect to claims 24, 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Miranda Le/

Primary Examiner, Art Unit 2167

